## Abstract

The present invention relates to a method of producing a mixture of  $5\alpha$ -pregnane derivatives represented by the formula  $^5$  (II) and the formula (III), which is characterized by reacting a pregnane derivative represented by the formula (I) with a metal selected from alkali metals and alkaline earth metals in the presence of a proton donor and an amine and/or ammonia. According to the present invention, a method capable of producing  $5\alpha$ -pregnane derivatives useful as synthetic intermediates for squalamine, in a high yield from easily available raw materials, can be provided:

$$(II)$$

$$(III)$$

$$(III)$$

wherein  $R^1$  is a hydroxyl-protecting group, and  $R^2$ ,  $R^{11}$  and  $R^{12}$  are <sup>15</sup> each independently a hydrogen atom or a hydroxyl-protecting group.